

# BROOKLYN

## WATERFRONT GREENWAY

### Columbia Street Waterfront Park

Open Space Node Analysis  
*Briefing Book*

Winter 2011



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The Columbia Street Waterfront Park briefing book was created by Regional Plan Association Summer Associate Christina Twomey. Milton Puryear of the Brooklyn Greenway Initiative and RPA staff Rob Pirani, Rob Freudenberg, Paul Winters, Jeff Ferzoco, and Ben Oldenburg also contributed to the creation of this book.

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NYC GREENWAY

BROOKLYN WATERFRONT

DEPT. OF TRANSPORTATION

# The Brooklyn Waterfront Greenway

When complete, the Brooklyn Waterfront Greenway will be a 14-mile, off-street route connecting neighbors and neighborhoods to four major parks and over a dozen local open spaces on Brooklyn's historic waterfront. Separate paths for bicycles and pedestrians will allow cyclists and walkers to commute, exercise, explore, and relax from Newtown Creek to the Shore Parkway Greenway. The Brooklyn Waterfront Greenway is part of New York City's vastly growing greenway network – linking the planned Queens Greenway to the Manhattan greenway network, the Shore Parkway Greenway, and the Jamaica Bay Greenway.

Regional Plan Association (RPA) and Brooklyn Greenway Initiative (BGI) have collaborated on the planning and advocacy for this waterfront amenity over two phases funded by the State's Environmental Protection Fund/Local Waterfront Revitalization Program and sponsored by the Office of the Brooklyn Borough President. Working together with local communities through public planning workshops and other events, RPA and BGI have developed concept plans for the greenway's route and design through Community Boards 1, 2 and 6 – from Greenpoint to Red Hook. We have also prepared a distinct stewardship plan to anticipate maintenance costs and responsibilities for the greenway and its amenities, design principles, and a storm-water management plan. The next phase of this project involves the completion and implementation of a business plan for stewardship of the greenway, and the establishment of green spaces along its route.

## Greenway Map

-  Preliminary Greenway
-  Proposed Greenway
-  Existing Park Space
-  Planned Park Space



# Design Principles

**The Brooklyn Waterfront Greenway is more than a simple sidewalk or bicycling route. The breadth of recreational and open space benefits it creates requires a set of core planning principles. The following framework expresses the physical and programming recommendations generated by participants in community workshops:**

**Create a healthy green edge on the Brooklyn waterfront.** Establish public access to the Harbor waterfront and waters. Improve public health in communities that line this historically industrial waterfront by providing recreational amenities and programs. Restore and enhance ecological functions in the shoreline environment.

**Create Connections.** Connect the waterfront neighborhoods to each other, the rest of Brooklyn and neighboring greenways in Queens, south Brooklyn, and Manhattan. Knit together regional and community parks, unique neighborhood attractions, and the transit system.

**Explore the area's history and maintain its unique character.**

Create opportunities to showcase the complex and rich urban landscape along the Brooklyn waterfront and its neighborhoods. Respect the needs of Brooklyn's successful maritime industries while increasing the public's understanding of how the waterfront is used. Provide a variety of experiences that reflect this dynamic and changing landscape.

**Celebrate the diversity of Brooklyn.** Showcase neighborhoods, natural environments, culture, art, and industry. Accommodate the needs of a wide variety of people from local residents to destination-oriented visitors.



# Open Space Nodes

The Brooklyn Waterfront Greenway provides a safe environment for pedestrians and bicyclists by creating separate lanes for the two groups and by protecting both pathways from automobile traffic.

The entirety of the 14-mile Greenway will include landscaping and other greening elements. At strategic points along the route, a series of open space nodes will further enhance the Greenway experience for cyclists, pedestrians, neighbors, and families.

These nodes along the Greenway will offer relief from the urban environment by providing spaces for Greenway users to rest, relax, and recharge during their journey. Each open space node will offer a

different landscape, history and potential for unique design and experience.

What we are calling the Columbia Street Waterfront Park extends the benefits of the Greenway to community members and visitors in Brooklyn who may not otherwise choose the waterfront as a destination. By recapturing this roughly two-acre site for public use, there is the potential to draw in a variety of different people for different reasons. Whether it serves as a gathering point or an entry to the rest of the greenway network, the design of the site should facilitate and inspire a wide-variety of interests related to the waterfront

# The Briefing Book

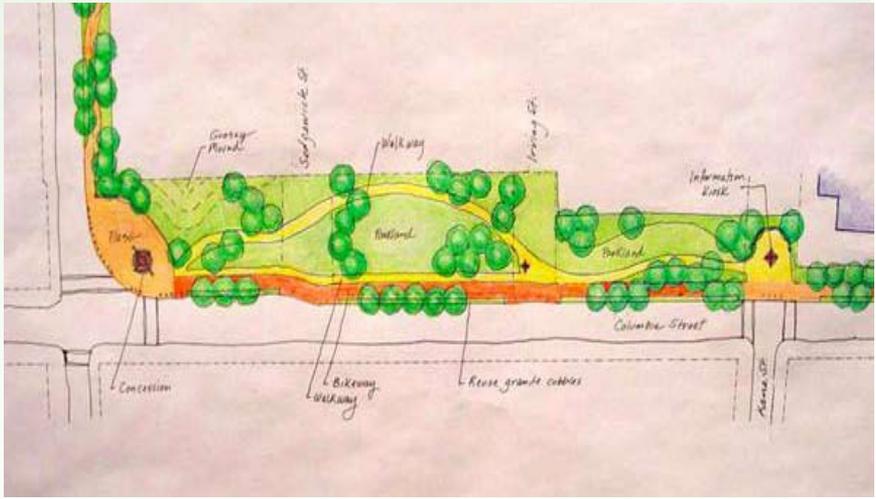


Image Credit: Donna Walcavage

This site analysis seeks to help community members, city agencies, and other stakeholders determine the best treatment for the site. We have taken into consideration information about the area's history, its connection to the Greenway, its demographics, and its available park and recreational amenities. At the site itself, we have reviewed topography, sunlight and shadows, existing tree cover, and habitat potential. The analysis also includes examples of existing public spaces and preliminary design ideas to serve as a guide for developing the site.

What emerged from our analysis were several key questions that we have included at the end of this document. The questions are designed to help focus the planning efforts for the site and gauge

the community's priorities for its use. These key issues, as well as the planning principles set forth by participants in previous community workshops, will serve as the basis for how the Columbia Street Waterfront Park is developed.

# Columbia Street Waterfront Park

Located in Brooklyn's Columbia Waterfront neighborhood, this narrow, 1.7 acre parcel of land stretches from Kane Street to Degraw Street on the west side of Columbia Street.

West of the site is the Red Hook Container Port, a cargo facility that provides raw and processed materials to the region. To the east is the Brooklyn-Queens Expressway and the dense

residential neighborhoods of Cobble Hill, Boerum Hill, and Carroll Gardens.

The site is less than 1/2 mile from Atlantic Avenue, the proposed southern terminus of the newly built Brooklyn Bridge Park. The Atlantic Basin, the Eric Basin, Gowanus Bay, and Red Hook Park are to the south. The Columbia Waterfront District is a neighborhood rich in history, character, and determination to overcome challenging circumstances.



# History

The DOT acquired this parcel of land to divert trucks traveling between the piers west of the site. Currently the space is used as a staging area for construction efforts taking place as part of DOT's twenty-two million dollar reconstruction of Colum-

bia Street. The reconstruction project includes new trunk water and distribution mains, a combined sewer, catch basins, hydrants, curbs, sidewalks, pedestrian ramps, roadways, street and traffic lighting, street trees, and the interim greenway.

**1649** Dutch first settle present day Columbia Waterfront District.

**1834** Columbia Street is included in the original charter for the City of Brooklyn. The street grid as it exists today begins to take form along Columbia Street.

**1848** The completion of the Atlantic Basin introduces maritime industry to the area and accelerates the development of residential buildings to house the thousands of dock workers and their families.

**1960s** Many piers are built and buildings demolished (including those on the node site) as Port Authority plans to expand the port. Ultimately, the main shipping facility for the New York Harbor is relocated to New Jersey, leaving many piers under-utilized.

**1970s** Construction trenches associated with a new interceptor sewage line along Columbia Street fill with water and sewage. As the trenches are pumped out, the water table falls, weakening the landfill under the foundations of nearby buildings. The city condemns the area, demolishes approximately 30 buildings, and promises to build housing on the leveled ground.

**1980s** The City implements the Columbia Terrace Housing Development Project. Phase 1, 2, 3, and 4 of the low-rise, low density housing development are completed. The parcel is designated for use by the DOT as a "diverter" lane for port bound trucks.



View of the Columbia waterfront and the New York Dock Company holdings in 1911. Image from Flatbush Gardener via flickr

# Current Use

The proposed site is currently used by the Department of Transportation and the Department of Environmental Protection as a staging area for construction efforts related to the \$20 million dollar reconstruction of Columbia Street project and the Gowanus Canal flushing tunnel. Construction materials, vehicles, and debris are stored behind fences that enclose the space. The Greenway runs directly adjacent to the site's eastern edge along Columbia Street, curves around the southern end, and continues down Degraw Street.

Once DOT and DEP no longer require this site, it will potentially become available for public use. The Parks Department has expressed interest in acquiring the site if the community is interested and sources for capital funding and ongoing maintenance can be identified.



# Neighborhood Profile

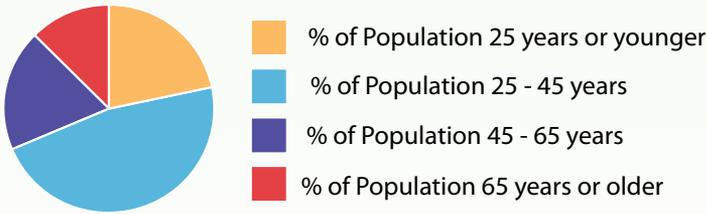
## Demographics

Approximately 11,593 people reside within a 10 minute walk of the site. The median age in this area is 35, compared to the citywide average of 34. The median household income is \$61,355, significantly higher than the citywide median household income of \$38,518 (2000 U.S. Census). Approximately 9.8% of the resi-

dents in these census tracts have incomes below the Federal Poverty level, while the citywide figure is 18%.

The largest percentage of the population (47%) is between 25-45 years of age. Approximately 22% of the population is below 25 years of age, suggesting an interest in active recreation.

## Age of residents near project site (2000 U.S. Census)



## Adjacent Sites

The Red Hook Container Port, located west of the project site, is designated as a Significant Marine Industrial Area (SMIA). The port can accommodate fully loaded ships with deep drafts and has on-dock fumigation facilities. In the recent past, this was the United States main port of entry for specialized commodities such as coffee and cocoa from Central and South America. Port Authority offices are at the northern end of the site. Though there are no current plans to redevelop the container yard

site, the future of the shipping terminal remains uncertain. The Brooklyn Cruise Terminal is located at pier 12. East of the site are the dense residential neighborhoods of Columbia Waterfront, Cobble Hill and Carroll Gardens. Much of this area is designated an historic district. The neighborhood directly adjacent to the site has tree lined streets, pedestrian friendly sidewalks, shops, restaurants, bars, artist's studios, and small community gardens.

# Site Conditions

## Views

Columbia Street offers expansive views of harbor extending to New Jersey and Manhattan's skyline including the Red Hook container terminal in the foreground. Only southern Manhattan, which is situated to the northwest of the site, is obscured in views of the skyline. Though the height and configuration of the containers change regularly, they are frequently stacked high enough that they block views of this portion of the city. Directly west of the site there are additional containers as well as the eighty to one hundred foot cranes used to hoist them on and off of the ships.

## Light and Shadows

This site receives full sun throughout the day. Cranes to the west cast narrow late-day shadows, but do not provide shade. Depending on their arrangement, adjacent shipping containers staked on top of each other may cast late-day shadows on the site.

## Vegetative Cover

There are no trees or other significant vegetative cover on the site.

## Topography

The site is completely flat.

## Stormwater Mgmt. Capacity

Currently there is no infrastructure in place to manage stormwater detention, retention, reuse, or distribution.

The site is partially paved, and the exposed soil is very compacted, significantly decreasing surface permeability and contributing to high amounts of runoff during precipitation events. Redevelopment of the site has the potential to decrease the amount of paved surface area as well as amend compacted soil to increase percolation.

## Soil

Recent use as a parking lot and staging area for construction have contributed to soil compaction. No testing has been done to explore possible contamination from prior industrial use.

# Nearby Open Spaces

By examining the programming available at nearby park and recreational sites, a clearer understanding of the neighborhood's open space needs emerges.



## ● Active Recreation

**1 & 2:** Van Voorhees Park – 5.25 Acres  
After Brooklyn Bridge Park, the largest park in the neighborhood. Features a baseball field, handball & tennis courts, fitness equipment, playgrounds, and bathrooms.

**5:** Mother Cabrini Park – .26 Acres  
Features playground and water sprinklers. Park is well shaded and open to the public daily.

**8:** Harold Ikes Playground - 1.82 Acres  
Features a paved athletic court, baseball diamond, and handball courts.

## ● Community Gardens

**3:** Human Compass Garden – .07 Acres

**4:** The Amazing Garden – .10 Acres

**9:** Summit Street Garden – .10 Acres

**7:** The Backyard Garden – .23 Acres

Project Greenthumb and community gardeners support these spaces. They celebrate community, art, and gardening. Programming includes potlucks, movie nights, and other family activities. The spaces are very small and only open one or two days a week.

## ● Open Spaces

**6:** Cabrini Green Meadow – .18 Acres  
Parks Dept. & Brooklyn Borough Pres. collaboration offering a lawn, meadow, and small grove of trees. The only unprogrammed green space in the neighborhood.

# Nearby Open Spaces

## Destination Parks



### **Brooklyn Bridge Park** **.3 miles from site**

#### Amenities/Activities:

Movies with a view, Workouts on the water, Dog Run, Playgrounds, Open lawn space, Food concessions, Athletic fields

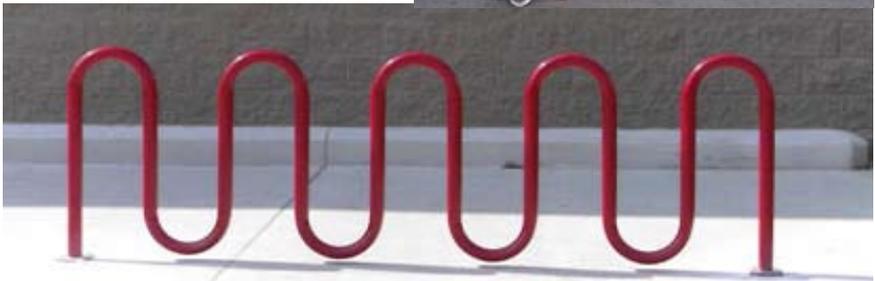
### **Red Hook Park** **1.3 miles from site**

Barbeque areas, Basketball courts, Eateries, Playgrounds, Recreational Centers, Soccer Fields, Baseball Diamonds, Bathrooms, Handball Courts, Pool, Spray Showers

The Columbia Street park node site is located between two prominent destination parks. Brooklyn Bridge Park, which is still in the process of being completed, is less than 1/2 miles north. Traveling south from the site along the greenway, Red Hook Park is 1.3 miles away. These parks are large and offer a variety of recreational amenities and activities. The site has the dual purpose of joining together these two large parks and also developing its own recreational niche by offering amenities not found at the two larger sites.

# Greenway Users

A comprehensive network of bike paths connects the Columbia Street District with the neighboring communities of DUMBO, Brooklyn Heights, Cobble Hill, Carroll Gardens, and Park Slope. The existing bike routes and BQE overpasses, as well as the site's proximity to the greenway and other destination parks make it a likely point of entry for greenway users coming from neighboring communities. The park will also capture passing greenway traffic. Making amenities available for pedestrians and cyclists will encourage greenway users to stop at the park. These amenities might include drinking fountains, a food concession, bike racks, bike rentals, bike repair stands, child biking areas, seating, and additional landscaping elements.



# Summary of Analysis

## Opportunities

- Views to Manhattan
- Views of shipping containers and cranes on the working waterfront
- Strong connection to the Greenway
- (50% of site perimeter)
- Views across the site
- No current uses will restrict redevelopment of the site
- Site is interface between the neighborhood and the container port

- Large, contiguous open space
- Abundant natural light; no shadows

## Constraints

- Possible soil contamination; may require remediation
- No direct views of water
- No trees; little existing vegetation

## Management and Maintenance

The Brooklyn Waterfront Greenway Plan for Stewardship and Maintenance (Winter 2008), written by the Brooklyn Greenway Initiative and Regional Plan Association, outlines an approach to maintaining the greenway that considers multiple groups as maintenance partners, including both landholders and city agencies.

Brooklyn Greenway Initiative (BGI) is prepared to coordinate and manage the operations and maintenance components of caring for the greenway. The open space nodes, however, will require a dedicated funding stream. BGI currently maintains green spaces including several acres of DOT landscaped areas. BGI is prepared to provide the following services at this site:

- Landscape maintenance

- Mechanical broom operations
- Snow plowing
- Routine maintenance during development
- Programming

Options for funding maintenance include the transfer of the site from the Department of Transportation to the Parks Department, which means assigning Parks the maintenance protocol outlined in the greenway's Stewardship Plan. Depending on the community's willingness, active neighborhood groups could also contribute to the maintenance of the site. Of course, the level of commitment needed is directly related to the complexity of the site's design and the extent to which the site is ultimately developed.

# Design Inspiration

As a working container port, Red Hook plays a crucial role in the city and region. The dramatic functional elements of the port—cranes and containers—could become elements of the park as “borrowed scenery”. Inclusion of these elements, or re-considered aspects of these elements, could link the community with the port

activity and inspire park and Greenway visitors to think about the port and neighborhood in new ways. Alternatively, there is potential for the park to contrast with the industrial quality of the area by creating a lush environment with extensive vegetation and natural plant material.

## Picnic Benches on Governors Island

The reconfigured sea containers featured at Picnic Point on Governors Island create a brightly-colored cheerful set of sculptures in the landscape, which also provide seating for visitors. The design for the Columbia Street site might consider port features as a way to engage visitors while maintaining the area’s maritime roots.



Picnic seating on Governors Island  
Image: Trish Mayo on Flickr

## Gas Works Park

This prize-winning park in Seattle was among the first city parks to incorporate physical materials from the previous industrial use in the design for the site. The resulting park showcases the dramatic gas works buildings as a foreground to the sweeping views of Seattle’s downtown. These elements lend a whimsical, fantastic side to the experience of the park.



Gas Works Park  
Image: The Intercontinental Gardener

# Design Inspiration

## Gantry Plaza State Park, Long Island City & Erie Basin Park, Red Hook

Elsewhere along the East River – at Gantry Plaza State Park and Erie Basin Park in Red Hook – new parks have emerged as destinations following the closure of industries located along the waterfront. The creative repurposing of extant maritime structures at these two parks creates a unique attraction for visitors.



Gantry Plaza State Park  
Images: asla.org and yelp.com

Erie Basin Park  
Images: The Word on Columbia Street

# Alternatives

## Open Green Space with Gardens



# Alternatives

## Bicycle Rental and Repair Shop



## Concession Stand and Seating Area



# Alternatives

## Sculpture Garden and Playground



# Focus Questions

**Listed below are several preliminary questions designed to help focus the conversation:**

Notes:

- 1.** What are the existing park recreational amenities in the neighborhood?
- 2.** What are the park and recreational needs in the community?
- 3.** Which of the alternatives shown in the briefing book best meets the needs of the community?
- 4.** What is the relationship between the open space node and nearby parks?
- 5.** What is the relationship between the open space node and the Waterfront Greenway?
- 6.** What is the relationship between the open space node and the container yard? How will its design vary if the container yard remains open, if it is closed and redeveloped?

# Sources

- Brooklyn Community Board Six, “Neighborhoods: Columbia Street District”  
<http://bit.ly/fiGtvK>
- Port Authority of New York and New Jersey  
<http://bit.ly/fU3qys>
- New York City Department of City Planning
- New York City Parks and Recreation

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*Submit comments to the facilitator for your group. You may also mail comments to Paul Winters at Regional Plan Association, 4 Irving Place, Suite 711-S, New York, New York, 10003.*

